

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB2004/000906

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G09B23/28 G01L5/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G09B G01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>EP 1 136 970 A (LUTAENKO VYACHESLAV FEDOROVICH) 26 September 2001 (2001-09-26)</p> <p>paragraphs [0033], [0034], [0057], [0076]; figures 1,5</p> <p style="text-align: center;">----- -/--</p>	<p>1-5, 10-12, 21,22, 26, 32-36, 41,42,51</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

4 June 2004

Date of mailing of the international search report

24. 08. 2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Aronsson, F

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 02/03905 A (CPRX LLC) 17 January 2002 (2002-01-17)</p> <p>page 2, line 7 - page 3, line 12 page 4, lines 1-4 page 5, lines 7-11 page 6, line 15 - page 7, line 11 page 8, line 29 - page 9, line 9 page 9, line 29 - page 10, line 4 page 10, line 23 - page 11, line 11 page 12, lines 8-18</p> <p>-----</p>	<p>1-7, 10-13, 21,22, 27,28, 32-38, 41,42,51</p>
X	<p>US 4 932 879 A (INGENITO MICHAEL ET AL) 12 June 1990 (1990-06-12)</p> <p>column 2, lines 18-56</p> <p>-----</p>	<p>1-5,10, 11,13, 21,22, 32-36, 41,42,51</p>
X	<p>US 4 883 271 A (FRENCH BARRY J) 28 November 1989 (1989-11-28)</p> <p>column 1, lines 19-22 column 3, lines 15-37 column 4, lines 56-63 column 6, lines 45-61 column 7, lines 29-35 column 7, line 66 - column 8, line 10 column 8, lines 51-55</p> <p>-----</p>	<p>1-5,12, 13, 21-25, 32-36, 51-54</p>
X	<p>WO 02/093272 A (LARKIN ADRIAN F ;YOUNGS PERRY (GB); HOLME ROBERT MUIR (US); JOHJAK) 21 November 2002 (2002-11-21) page 1, lines 10,11 page 2, line 11 page 6, lines 1,2 page 30, lines 5,6 page 65, line 14 page 69, lines 31,32,36 page 71, lines 13,14</p> <p>-----</p>	<p>1-5,13, 21,22, 32-36,51</p>

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### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
1-2, 26, 32, 33

#### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-2, 26, 32, 33

The sensor has a frequency response of at least 1 kHz.

1.1. claims: 1, 3, 4, 32, 34, 35

The sensor produces an output representative of the force applied to it.

1.2. claims: 1, 5, 32, 36

The sensor is arranged to detect thumps having an energy in the range 1J to 20J.

1.3. claims: 1, 6, 7, 27, 28, 32, 37, 38

Optical sensor.

1.4. claims: 1, 10, 11, 32, 41, 42

The mechanical properties of the target region are selected to simulate the precordial region of the chest of a patient.

1.5. claims: 1, 12

Means for analysing the manual thump.

1.6. claims: 1, 13

Means for outputting an indication of the detected parameters.

1.7. claims: 1, 21

Output port.

1.8. claims: 1, 22-25, 32, 51-54

A computer system.

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2. claims: 1, 8, 9, 32, 39, 40

A pre-impact speed detector.

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3. claims: 1, 14-20, 29-31, 32, 43-50

An array of sensors.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1136970	A	26-09-2001	RU 2176822 C2	10-12-2001
			EP 1136970 A1	26-09-2001
			US 6638073 B1	28-10-2003
			WO 0008619 A1	17-02-2000
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WO 0203905	A	17-01-2002	AU 8288901 A	21-01-2002
			WO 0203905 A2	17-01-2002
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US 4932879	A	12-06-1990	US 4828501 A	09-05-1989
			US 4915635 A	10-04-1990
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US 4883271	A	28-11-1989	US 4761005 A	02-08-1988
			EP 0377007 A1	11-07-1990
			JP 3501345 T	28-03-1991
			WO 8910166 A1	02-11-1989
			AU 6345286 A	16-04-1987
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			US 2003163287 A1	28-08-2003
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